

ADDITIONAL NOTES ON THE GENUS VITEX. IV

Harold N. Moldenke

VITEX Tourn.

Additional & emended synonymy: Wallrothia Roth, Nov. Pl. Sp. 317. 1821 [not Wallrothia Spreng., 1815]. Allazia Silva Manso, Enum. 36. 1836. Agnus-castus [Tourn.] Carr. ex Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 1: 59, in syn. 1893. Agnus-castus Carr. ex Airy-Shaw in Willis, Dict. Flow. Pl., ed. 7, 32, in syn. 1966. Ephialis "Banks & Soland. ex A. Cunn." apud Airy-Shaw in Willis, Dict. Flow. Pl., ed. 7, 408, in syn. 1966. Ephialum Wittst. ex Airy-Shaw in Willis, Dict. Flow. Pl., ed. 7, 409, in syn. 1966. Mailelou Adans. ex Airy-Shaw in Willis, Dict. Flow. Pl., ed. 7, 687, in syn. 1966. Varangevillea Willis (in part) ex Airy-Shaw in Willis, Dict. Flow. Pl., ed. 7, 1173, in syn. 1966.

Additional & emended bibliography: N. L. Burm., Fl. Ind. 138, pl. 43, [fig. 2]. 1768; W. Jones, Treat. Pl. Ind. 5: 136. 1790; Hook., Bot. Misc. 285. 1830; A. Cunn., Ann. Nat. Hist., ser. 1, 1: 461—462. 1838; W. Jack, Calc. Journ. Nat. Hist. 4 (13): 40. 1843; Benth., Bot. Voy. Sulph. 154—155. 1846; Ettingsh., Blatt-Skel. Dikot. 79, pl. 32, fig. 6 & 8. 1861; Beddome, Forester's Man. Bot. S. Ind. 171. 1873; Roxb., Fl. Ind., repr. ed. Carey, 476—482. 1874; Boiss., Fl. Orient. 4: 535. 1879; Murray, Pl. & Drugs Sind 175. 1881; E. T. Atkinson, Him. Dist. Statist. Acct. NW. Prov. 10: 315 & 753. 1882; Aitch., Journ. Linn. Soc. Lond. Bot. 19: 182. 1882; Campbell & Watt, Descrip. Cat. Econom. Prod. Chutia Nagpur No. 8498. 1886; H. O. Forbes, Wand. Naturforsch. Malay. Arch. 2: 226. 1886; S. Elliot, Ann. Bot. 5: 376, pl. 22, fig. 119. 1891; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 1: 59, 77, 297, 304, 447, 529, 582, 619, & 844 (1893), 2: 83 & 308 (1894), and 2: 642, 667, 1121, & 1213—1214. 1895; Perkin, Journ. Chem. Soc. 73: 1019. 1898; Gürke, Notizbl. Bot. Gart. Berl. 3: 77. 1900; Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 449 & 457. 1906; Prain, Ind. Kew. Suppl. 3: 189. 1908; Huber, Bol. Mus. Goeldi 5: 209—222, pl. 1—4. 1908; Engl. in Engl. & Drude, Veget. Erde 9 (1, 1): 295, fig. 261. 1910; Craib, Contrib. Fl. Siam Dicot. 164—165. 1912; J. Matsum., Ind. Pl. Jap. 2 (2): 534. 1912; F. M. Bailey, Compreh. Cat. Queensl. Pl. 384 & 386, fig. 362. 1913; Prain, Ind. Kew. Suppl. 4, pr. 1, 248. 1913; Pittier, Contrib. U. S. Nat. Herb. 18: 171. 1916; Bose, Man. Ind. Bot. 131 & 252. 1920; Prain, Ind. Kew. Suppl. 5, pr. 1, 272—273. 1921; F. Miranda, Indiana For. 48: 596. 1922; Haines, Bot. Bihar & Orissa 4: 710—713. 1922; H. J. Lam, Bull. Jard. Bot. Buitenz., ser. 3, 5: 175—178. 1922; H. J. Lam in Bakh. & Lam, Nov. Guinea 14, Bot. 1: 169. 1924; Gamble, Fl. Presid. Madras 6: 1086 & 1101—1103. 1924; H. F. MacMillan, Trop. Plant. & Gard., ed. 1, 207, 217, 219, 380, & 592. 1925; A. W. Hill, Ind. Kew. Suppl. 6: 219.

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 [*142*]: 1—91, pl. 1—13. 1928; A. W. Hill, Ind. Kew. Suppl. 7:
 56 & 252. 1929; Pieper in Fedde, Repert. Spec. Nov. 26: 161—166.
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 297, 304, 447, 529, 582, 619, & 844 (1946) and 2: 83, 642, 667,
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 Trop. Plant. & Gard., ed. 5, pr. 2, 197, 214, 217, 366, & 558.
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It is perhaps worth noting here that Ephielis Schreb. is a synonym of Ratonia DC. in the Sapindaceae, while Wallrothia Spreng. is Seseli L. in the Ammiaceae. Willis (1958) places the genus Macrostegia Nees in the Acanthaceae.

Additional excluded species are

Vitex adulterina Hausskn. = Verbena adulterina Hausskn.

Vitex formosana Hemsl. = Vitis formosana Hemsl., Vitaceae

Vitex pinnata Burm. f. = Aglaia odorata Lour., Meliaceae

Vitex zeylanica Burm. f. = Stereospermum sp., Bignoniaceae

The Boissier (1879) reference cited above is sometimes cited as "1875", but actually only pages 1 to 280 were issued in that year; pages 281 to 1276 first appeared in print in the year 1879. The Glaziou 3809, distributed as a Vitex sp., is actually Clerodendrum viscosum Vent.

Further excluded species are

Vitex dalrympleana F. Muell. = Gmelina dalrympleana (F. Muell.)
H. J. Lam

Vitex involucratus Presl = Sphenodesme involucrata (Presl) B. L.
Robinson

VITEX ACUMINATA R. Br.

Additional bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213 & 1214. 1895; F. M. Bailey, Compreh. Cat. Queensl. Pl. 384 & 386, fig. 362. 1913; Stapf, Ind. Lond. 6: 478. 1931; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 2, 2: 1213 & 1214 (1946) and pr. 3, 2: 1213 & 1214. 1960; R. E. Harrison, Handb. Trees & Shrubs, rev. ed., 330. 1960; Moldenke, Phytologia 15: 79. 1967.

VITEX AGELAEIFOLIA Mildbr.

Synonymy: Vitex aglaeifolia Mildbr. ex Moldenke, Phytologia 15: 79, sphalm. 1967.

Additional bibliography: A. W. Hill, Ind. Kew. Suppl. 7: 252 (1929) and 8: 249. 1933; Moldenke, Phytologia 15: 79. 1967.

VITEX AGELAEIFOLIA var. RUFULA Moldenke

Synonymy: Vitex aglaeifolia var. rufula Moldenke, Phytologia 15: 79, sphalm. 1967.

Additional bibliography: Moldenke, Phytologia 15: 79. 1967.

VITEX AGNUS-CASTUS L.

Additional & emended bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213 & 1214. 1895; Clute, Amer. Bot. 41: 70-71. 1935; Worsdell, Ind. Lond. Suppl. 2: 500. 1941; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 2, 2: 1213 & 1214. 1946; Anon., U. S. Dept. Agr. Bot. Subj. Index 15: 14362. 1958; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 3, 2: 1213 & 1214. 1960; R. E. Harrison, Handb. Trees & Shrubs, rev. ed., 329-330. 1960; N. Taylor, Guide Gard. Shrubs & Trees 325 & opp. 327, fig. 5. 1965; Guest, Fl. Iraq 1: 84 & 106. 1966; Moldenke, Phytologia 15: 79-87. 1967.

Additional illustrations: R. E. Harrison, Handb. Trees & Shrubs, rev. ed., 329. 1960; N. Taylor, Guide Gard. Shrubs & Trees opp. 327, fig. 5 [in color]. 1965.

Guest (1966) reports that this species comprises 10-20 percent of the *Asphodelatum aestivus* association and 50-60 percent of the steppe association in Iraq. Taylor (1965) tells us that the corollas have one lobe larger than the others and that the species is hardy from Life Zone 5 southward in the United States, otherwise it winterkills and then grows back. The Boissier (1879) reference to this species is sometimes cited as "1875", but the page involved was not actually issued until the year 1879.

VITEX AGNUS-CASTUS f. ALBA (West.) Rehd.

Additional bibliography: N. Taylor, Guide Gard. Shrubs & Trees 325. 1965; Moldenke, Phytologia 15: 84. 1967.

VITEX AGNUS-CASTUS var. CAERULEA Rehd.

Additional bibliography: Moldenke, Phytologia 15: 82 & 84-85. 1967.

VITEX AGNUS-CASTUS var. DIVERSIFOLIA (Carr.) Schelle

Additional bibliography: Moldenke, Phytologia 15: 85 & 87. 1967.

VITEX AGNUS-CASTUS f. LATIFOLIA (Mill.) Rehd.

Additional bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1214 (1895), and pr. 2, 2: 1214 (1946), and pr. 3, 1214. 1960; N. Taylor, Guide Gard. Shrubs & Trees 325. 1965; Moldenke, Phytologia 15: 79, 82, & 84-86. 1967.

Taylor (1965) says that this form has larger leaves and deeper-colored flowers, is the most widely cultivated form growing in ordinary garden soil, and that north of Life Zone 5 in the U.S.A. it

should be cut back in the autumn and mulched.

VITEX AGNUS-CASTUS var. PSEUDO-NEGUNDO Hausskn.

Additional synonymy: Vitex negundo var. pseudo-negundo Hausskn. ex Gall, Eizikowitch, & Prusbul, Ind. Sem. Hort. Bot. Univ. Tel-aviv. 5. 1965. Vitex agnus-castus var. pseudonegundo Hausskn. ex Guest, Fl. Iraq 1: 84. 1966.

Additional bibliography: Prain, Ind. Kew. Suppl. 5, pr. 1, 273. 1921; E. J. Salisb., Ind. Kew. Suppl. 11: 265. 1953; Prain, Ind. Kew. Suppl. 5, pr. 2, 273. 1960; Guest, Fl. Iraq 1: 84. 1966; Moldenke, Phytologia 15: 79 & 86—87. 1967.

VITEX AJUGAEFLORA Dop

Additional & emended bibliography: A. W. Hill, Ind. Kew. Suppl. 9: 297. 1938; Moldenke, Phytologia 8: 27. 1961.

VITEX ALTISSIMA L.f.

Additional & emended bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213 & 1214. 1895; E. D. Merr., Philip. Journ. Sci. 19: 331. 1921; Gamble, Fl. Presid. Madras 6: 1102—1103. 1924; H. F. MacMillan, Trop. Plant. & Gard., ed. 1, 207, 217, 219, & 592. 1925; Stapf, Ind. Lond. 6: 478 & 479. 1931; H. F. MacMillan, Trop. Plant. & Gard., ed. 4, 197, 214, 217, & 558 (1935) and ed. 5, pr. 1, 197, 214, 217; & 558. 1943; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 2, 2: 1213 & 1214. 1946; H. F. MacMillan, Trop. Plant. & Gard., ed. 5, pr. 2, 197, 214, 217, & 558. 1948; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 3, 2: 1213 & 1214. 1960; Arora, Journ. Indian Bot. Soc. 45: 133 & 135. 1966; Gausson & al., Trav. Sect. Scient. & Tech. Inst. Franç. Pond. Hors ser. 7: 49, 59, & 104. 1966; Moldenke, Phytologia 15: 87—89. 1967.

Arora (1966) refers to this plant as a large tree, with an average height of 10 meters, common in the second story of the semi-evergreen forest. Merrill (1921) is of the opinion that the Vitex pinnata of Linnaeus belongs in the synonymy of V. altissima but I regard it as the proper designation for what used to be called V. pubescens Vahl.

VITEX ALTISSIMA f. SUBGLABRA Thwaites, Enum. Fl. Zeyl. 244. 1864.

Synonymy: Vitex zeylanica Turcz., Bull. Soc. Imp. Nat. Mosc. 36 (2): 223. 1863 [not V. zeylanica Burm. f., Fl. Ind. 138. 1768]. Vitex altissima var. zeylanica (Turcz.) C. B. Clarke in Hook. f., Fl. Brit. Ind. 4: 584. 1885.

Bibliography: Burm. f., Fl. Ind. 138. 1768; Turcz., Bull. Soc. Imp. Nat. Mosc. 36 (2): 223. 1863; Thwaites, Enum. Fl. Zeyl. 244. 1864; C. B. Clarke in Hook. f., Fl. Brit. Ind. 4: 584. 1885; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1214. 1895; Journ. Agr. Univ. Porto Rico 20: 133 & 626. 1936; Moldenke, Geogr. Distrib. Avicenn. 40. 1939; Moldenke, Prelim. Alph. List Invalid Names 49 & 52. 1940; Moldenke, Alph. List Invalid Names 52 & 56. 1942; Moldenke, Geogr. Distrib. Verbenac., ed. 1, 56, 75, & 102.

1942; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 2, 2: 1214.
 1946; Moldenke, Known Geogr. Distrib. Verbenac., ed. 2, 130, 165,
 & 200. 1949; Moldenke, Phytologia 5: 202—203. 1955; Moldenke,
 Résumé 167, 225, 380, 391, & 475. 1959; Jacks. in Hook. f. &
 Jacks., Ind. Kew., pr. 3, 2: 1214. 1960; Moldenke, Phytologia 15:
 88—89. 1967.

The Vitex zeylanica Burm. f. (1768), according to Jackson (1895), is probably a species of Stereospermum in the Bignoniaceae. Under the present edition of the International Rules of Botanical Nomenclature, however, Burman's binomial invalidates the later homonymous V. zeylanica of Turczaninow (1863) and renders the epithet "zeylanica" unavailable for the present taxon, which, therefore, needs a new designation.

VITEX ALTISSIMA var. ZEYLANICA (Turcz.) C. B. Clarke

This trinomial is invalid and must be replaced by V. altissima f. subglabra Thwaites, as explained above.

VITEX ALTMANNI Moldenke

Additional bibliography: G. Taylor, Ind. Kew. Suppl. 12: 151. 1959; Moldenke, Phytologia 8: 28. 1961.

VITEX AMANIENSIS Pieper

Additional & emended bibliography: A. W. Hill, Ind. Kew. Suppl. 8: 249. 1933; Moldenke, Phytologia 8: 28. 1961.

VITEX AMBONIENSIS Gürke

Additional bibliography: Thiselt.-Dyer, Ind. Kew. Suppl. 2: 194. 1904; Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 457 (1906) and pr. 2, 457. 1941; J. Hutchinson, Botanist in South. Afr. 464. 1946; Durand & Jacks., Ind. Kew. Suppl. 1, pr. 3, 457. 1959; Moldenke, Phytologia 15: 89. 1967.

Hutchinson (1946) describes this plant as a shrub, the leaves digitately 5-foliolate, the leaflets broadly oblanceolate, softly pubescent beneath, and the fruits plum-colored, borne on a plate-like fruiting-calyx, and cites his no. 3304.

VITEX ANGOLENSIS Gürke

Additional bibliography: Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 457 (1906), pr. 2, 457 (1941), and pr. 3, 457. 1959; Moldenke, Phytologia 15: 89. 1967.

VITEX APPUNI Moldenke

Additional bibliography: E. J. Salisb., Ind. Kew. Suppl. 11: 265. 1953; Moldenke, Phytologia 15: 89. 1967.

VITEX AUREA Moldenke

Additional bibliography: G. Taylor, Ind. Kew. Suppl. 12: 151. 1959; Moldenke, Phytologia 15: 90. 1967.

VITEX AXILLARIS Wall.

Additional bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213 (1895), pr. 2, 2: 1213 (1946), and pr. 3, 2: 1213. 1960; Moldenke, Phytologia 15: 90. 1967.

VITEX BALBI Chiov.

Additional bibliography: A. W. Hill, Ind. Kew. Suppl. 9: 297. 1938; Moldenke, Phytologia 15: 90. 1967.

VITEX BARBATA Planch.

Additional synonymy: *Vitex barbata* "Planch. ex Baker" apud Worsdell, Ind. Lond. Suppl. 2: 500. 1941.

Additional bibliography: Thiseit.-Dyer, Ind. Kew. Suppl. 2: 193. 1904; Hutchinson & Dalz., Fl. W. Trop. Afr., ed. 1, 2: 276. 1937; Aubrév., Fl. Forest. Soudano-Guin. 504 & 507, pl. 115 (4). 1950; Berhaut, Fl. Sénégal 21. 1954; Moldenke, Phytologia 15: 90 & 95. 1967.

Additional illustrations: Aubrév., Fl. Forest. Soudano-Guin. pl. 115 (4). 1950.

VITEX BEFOTAKENSIS Moldenke

Additional bibliography: G. Taylor, Ind. Kew. Suppl. 12: 151. 1959; Moldenke, Phytologia 15: 90. 1967.

VITEX BENTHAMIANA Domin

Additional bibliography: A. W. Hill, Ind. Kew. Suppl. 8: 249. 1933; Moldenke, Phytologia 15: 90. 1967.

VITEX BENUENSIS Engl.

Additional & emended bibliography: A. W. Hill, Ind. Kew. Suppl. 8: 249. 1933; Moldenke, Phytologia 15: 90. 1967.

VITEX BEQUAERTI DeWild.

Additional bibliography: Prain, Ind. Kew. Suppl. 5, pr. 1, 272 (1921) and pr. 2, 272. 1960; Moldenke, Phytologia 15: 90. 1967.

VITEX BERAVIENSIS Vatke

Additional bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213. 1895; A. W. Hill, Ind. Kew. Suppl. 7: 252. 1929; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 2, 2: 1213. 1946; Anon., U. S. Dept. Agr. Bot. Subj. Index 15: 14361. 1958; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 3, 2: 1213. 1960; Moldenke, Phytologia 15: 90-91. 1967.

VITEX BETSILIENSIS Humbert

Additional bibliography: Hill & Salisb., Ind. Kew. Suppl. 10: 244. 1947; Moldenke, Phytologia 15: 91. 1967.

VITEX BOGALENSIS Wernham

Additional bibliography: Prain, Ind. Kew. Suppl. 5, pr. 1, 272 (1921) and pr. 2, 272. 1960; Moldenke, Phytologia 15: 91. 1967.

VITEX BOJERI Schau.

Additional & emended synonymy: Vitex ferruginea Bojer ex Schau. in A. DC., Prodr. 11: 694, in syn. 1847 [not V. ferruginea Baker, 1900, nor Schum., 1902, nor Schum. & Thonn., 1827, nor Vahl, 1818]. Vitex bojeri "Schau. in DC." apud Worsdell, Ind. Lond. Suppl. 2: 500. 1941.

Additional bibliography: S. Elliot, Ann. Bot. 5: 376, pl. 22, fig. 119. 1891; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213. 1895; Stapf, Ind. Lond. 6: 478. 1931; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 2, 2: 1213 (1946) and pr. 3, 2: 1213. 1960; Moldenke, Phytologia 15: 92. 1967.

Additional illustrations: S. Elliot, Ann. Bot. 5: pl. 22, fig. 119. 1891.

VITEX BRACTEATA S. Elliot, Journ. Linn. Soc. Lond. 29: 42. 1891
[not V. bracteata Horsf., 1858].

Additional bibliography: Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 457 (1906), pr. 2, 457 (1941), and pr. 3, 457. 1959; Moldenke, Phytologia 15: 92. 1967.

Vitex bracteata Horsf. belongs in the synonymy of V. pinnata L. It was never validly published under the tenets of the present International Rules of Botanical Nomenclature, so does not preclude the use of the specific epithet for the present taxon.

VITEX BREVILABIATA Ducke

Additional bibliography: A. W. Hill, Ind. Kew. Suppl. 7: 252. 1929; Moldenke, Phytologia 15: 92. 1967.

VITEX BREVIPETIOLATA Moldenke

Additional bibliography: Hill & Salisb., Ind. Kew. Suppl. 10: 244. 1947; Moldenke, Phytologia 15: 92. 1967.

VITEX BUCHANANII J. G. Baker

Emended synonymy: Vitex buchanani Baker ex Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 457. 1906.

Additional bibliography: Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 457 (1906), pr. 2, 457 (1941), and pr. 3, 457. 1959; Moldenke, Phytologia 15: 92. 1967.

VITEX BUCHANANII var. QUADRANGULA (Gürke) Pieper

Additional bibliography: Thiselt.-Dyer, Ind. Kew. Suppl. 2: 194. 1904; Moldenke, Phytologia 15: 92. 1967.

VITEX BUCHNERI Gürke

Additional bibliography: Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 457 (1906), pr. 2, 457 (1941), and pr. 3, 457. 1959; Moldenke, Phytologia 15: 93 & 99. 1967.

VITEX BUDDINGII Moldenke

Additional bibliography: G. Taylor, Ind. Kew. Suppl. 12: 151. 1959; Moldenke, Phytologia 15: 93. 1967.

VITEX CAESPITOSA Exell

Additional bibliography: A. W. Hill, Ind. Kew. Suppl. 9: 297. 1938; Moldenke, Phytologia 15: 93. 1967.

VITEX CALOTHYRSA Sandw.

Additional bibliography: A. W. Hill, Ind. Kew. Suppl. 8: 249. 1933; Moldenke, Phytologia 15: 93. 1967.

VITEX CANESCENS Kurz

Additional bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213. 1895; Craib, Contrib. Fl. Siam Dicot. 164. 1912; P'ei, Sinensia 2: 70 & 73. 1932; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 2, 2: 1213 (1946) and pr. 3, 2: 1213. 1960; Moldenke, Phytologia 15: 93. 1967.

VITEX CAPITATA Vahl

Additional synonymy: Vitex brasiliensis Juss. ex Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213. 1895.

Additional & emended bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213. 1895; Stapf, Ind. Lond. 6: 478. 1931; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 2, 2: 1213. 1946; Romero Castañeda, Caldasia 7: 49. 1955; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 3, 2: 1213. 1960; Moldenke, Phytologia 15: 93—94. 1967.

Additional citations: SURINAM: Irwin, France, Söderstrom, & Holmgren 55514 (E, F, K, N, N, N, N, Su, Ut, W).

VITEX CARBUNCULORUM Smith & Ramas

Additional bibliography: Prain, Ind. Kew. Suppl. 5, pr. 1, 272 (1921) and pr. 2, 272. 1960; Moldenke, Phytologia 15: 94. 1967.

VITEX CARVALHI Gürke

Additional bibliography: Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 457 (1906), pr. 2, 457 (1941), and pr. 3, 457. 1959; Moldenke, Phytologia 15: 94. 1967.

VITEX CAULIFLORA Moldenke

Additional bibliography: G. Taylor, Ind. Kew. Suppl. 12: 151. 1959; Moldenke, Phytologia 15: 94—95. 1967.

VITEX CESTROIDES J. G. Baker

Additional bibliography: Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 457 (1906), pr. 2, 457 (1941), and pr. 3, 457. 1959; Moldenke, Phytologia 15: 95. 1967.

VITEX CHARIENSIS A. Chev.

Additional bibliography: Prain, Ind. Kew. Suppl. 5, pr. 1, 272 (1921) and pr. 2, 272. 1960; Moldenke, Phytologia 15: 95. 1967.

VITEX CHRYSLERIANA Moldenke

Additional bibliography: Hill & Salisb., Ind. Kew. Suppl. 10:

244. 1947; Moldenke, *Phytologia* 15: 95. 1967.

VITEX CHRYSOCARPA Planch.

Additional bibliography: Jacks. in Hook. f. & Jacks., *Ind. Kew.*, pr. 1, 2: 1213. 1895; A. W. Hill, *Ind. Kew. Suppl.* 8: 249. 1933; Jacks. in Hook. f. & Jacks., *Ind. Kew.*, pr. 2, 2: 1213. (1946) and pr. 3, 2: 1213. 1960; Moldenke, *Phytologia* 15: 90 & 95—96. 1967.

VITEX CHRYSOMALLUM Steud.

Additional & emended bibliography: Jacks. in Hook. f. & Jacks., *Ind. Kew.*, pr. 1, 1: 529 (1893), 2: 1213 & 1214 (1895), and pr. 2, 1: 529 (1946) and 2: 1213 & 1214. 1946; Moldenke in Humbert, *Fl. Madag.* 174: 76, 77, 135—139, & 271—273, fig. 21 (6). 1956; Jacks. in Hook. f. & Jacks., *Ind. Kew.*, pr. 3, 1: 529 (1960) and 2: 1213 & 1214. 1960; Moldenke, *Phytologia* 15: 96. 1967.

VITEX CILIATA Pierre

Additional & emended bibliography: A. W. Hill, *Ind. Kew. Suppl.* 8: 249. 1933; Moldenke, *Phytologia* 8: 32. 1961.

VITEX CILIO-FOLIOLATA A. Chev.

Additional & emended bibliography: A. W. Hill, *Ind. Kew. Suppl.* 6: 219 (1926) and 9: 297. 1938; Moldenke, *Phytologia* 15: 96. 1967.

Hill (1938) reduces this species to synonymy under V. rivularis Gtrke.

VITEX CLEMENTIS Britton & P. Wils.

Additional bibliography: A. W. Hill, *Ind. Kew. Suppl.* 6: 219. 1926; Moldenke, *Phytologia* 8: 32. 1961.

VITEX COCHINCHINENSIS Dop

Additional bibliography: A. W. Hill, *Ind. Kew. Suppl.* 9: 297. 1938; Moldenke, *Phytologia* 15: 96—97. 1967.

Illustrations: Dop, *Trav. Lab. For. Toulouse* 1 (1): pl. 3. 1928.

VITEX COFASSUS Reinw.

Additional synonymy: Vitex monophylla K. Schum. apud Durand & Jacks., *Ind. Kew. Suppl.* 1, pr. 1, 457. 1906.

Additional & emended bibliography: Rumph., *Herb. Amboin.* 3: 28, pl. 14, fig. B. 1743; Jacks. in Hook. f. & Jacks., *Ind. Kew.*, pr. 1, 2: 1213 & 1214. 1895; Durand & Jacks., *Ind. Kew. Suppl.* 1, pr. 1, 457. 1906; Stapf, *Ind. Lond.* 6: 478. 1931; Durand & Jacks., *Ind. Kew. Suppl.* 1, pr. 2, 457. 1941; Jacks. in Hook. f. & Jacks., *Ind. Kew.*, pr. 2, 2: 1213 & 1214. 1946; Durand & Jacks., *Ind. Kew. Suppl.* 1, pr. 3, 457. 1959; Jacks. in Hook. f. & Jacks., *Ind. Kew.*, pr. 3, 2: 1213 & 1214. 1960; Moldenke, *Phytologia* 15: 77 & 97—98. 1967.

Additional illustrations: Rumph., *Herb. Amboin.* 3: pl. 14, fig.

B. 1743.

VITEX COLUMBIENSIS Pittier

Additional & emended bibliography: A. W. Hill, Ind. Kew. Suppl. 7: 252. 1929; Romero Castañeda, Caldasia 7: 49—50. 1955; J. A. Peters, Biol. Abstr. 30: 1703. 1956; Anon., Biol. Abstr. 30: 4370. 1958; G. Taylor, Ind. Kew. Suppl. 12: 151. 1959; Moldenke, Phytologia 15: 98. 1967.

VITEX COMPRESSA Turcz.

Additional & emended bibliography: Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 1, 2: 1213. 1895; A. W. Hill, Ind. Kew. Suppl. 7: 252. 1929; Moldenke, Torreya 33: 67—69. 1933; A. W. Hill, Ind. Kew. Suppl. 9: 297. 1938; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 2, 2: 1213. 1946; Romero Castañeda, Caldasia 7: 49. 1955; Anon., U. S. Dept. Agr. Bot. Subj. Index 15: 14362. 1958; Jacks. in Hook. f. & Jacks., Ind. Kew., pr. 3, 2: 1213. 1960; Moldenke, Phytologia 15: 98—99. 1967.

The H. Pittier 15118, cited by me in Phytologia 15: 97 (1967) as from "State undetermined", is actually from Anzoategui, Venezuela.

VITEX CONGENSIS A. Chev.

Additional bibliography: A. W. Hill, Ind. Kew. Suppl. 6: 219. 1926; Moldenke, Phytologia 15: 99. 1967.

VITEX CONGESTA Oliv.

Emended synonymy: Varangevillea hispidissima Ball. apud Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 449, sphalm. 1906.

Additional & emended bibliography: Durand & Jacks., Ind. Kew. Suppl. 1, pr. 1, 449 & 457. 1906; Stapf, Ind. Lond. 6: 478. 1931; Durand & Jacks., Ind. Kew. Suppl. 1, pr. 2, 449 & 457 (1941) and pr. 3, 449 & 457. 1959; Moldenke, Phytologia 15: 99. 1967.

VITEX CONGOLENSIS DeWild. & Th. Dur.

Additional bibliography: Thistel.-Dyer, Ind. Kew. Suppl. 2: 193 & 194. 1904; Moldenke, Phytologia 15: 93, 99—100, & 109. 1967.

VITEX CONGOLENSIS var. GILLETII (Gürke) Pieper

Additional bibliography: Prain, Ind. Kew. Suppl. 3: 189. 1908; Moldenke, Phytologia 15: 100. 1967.

VITEX COOPERI Standl.

Additional bibliography: A. W. Hill, Ind. Kew. Suppl. 8: 249. 1933; Moldenke, Phytologia 8: 34—35. 1961.

VITEX CORDATA Aubrév.

Additional bibliography: E. J. Salisb., Ind. Kew. Suppl. 11: 265. 1953; Moldenke, Phytologia 15: 100. 1967.